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- * Saving the world step by step
- * (Arthur Lemmens, June 2005)
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I propose a breakout group for discussing design and implementation aspects of persistence and object-oriented database libraries for Common Lisp. I'd like to focus on libraries that do a significant part of the work in Common Lisp itself; for this breakout group I'm not interested in discussing systems that are basically just an interface to external (e.g. SQL) databases.

Depending on background and interests of the participants, we could work on one or more of the following subjects:

- retrieval languages
- incremental disk-based garbage collection
- ensuring consistency (e.g. referential integrity)
- transactions
- comparing hierarchical vs. relational databases
- disk caching strategies
- schema changes
- slot indexing strategies (btrees, hashtables, ...)
- limits to the persistent-object abstraction barrier
- using the MOP to implement persistent classes
- comparing databases vs. 'frame knowledge representation systems'
- comparing everything-is-in-memory vs. everything-is-on-disk systems
- etc.

I expect that most potential participants will have a strong background in Common Lisp and a not-so-strong background in the implementation of database systems. That's why I especially want to encourage participants with the reverse combination of strengths: people with a strong background in database implementation and an interest in applying their knowledge in a Common Lisp context will be very welcome.

Some references:

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- * Jim Gray, Andreas Reuter: "Transaction Processing - Concepts and Techniques"
Morgan Kaufmann Publishers, Inc.
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- * Hans Huebner and Manuel Odendahl: "BKNR - Codename: Sputnik"
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- * Heiko Kirschke: "Persistenz in object-orientierten Programmiersprachen am Beispiel von CLOS"
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- * Arthur Lemmens: 'slides' of a talk about persistence in Common Lisp
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<http://www.pentaside.org/paper/persistence-lemmens.txt>
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<http://www.sts.tu-harburg.de/~r.f.moeller/symbolics-info/statice.html>
- * Andreas Paepcke: "PCLOS Reference Manual"
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